

The top half of the slide features a light blue background. On the left, the word "DELPHI" is written in a bold, black, sans-serif font. To the right of the text is a vertical rectangular area containing an abstract digital graphic. This graphic depicts a perspective view of a digital tunnel or data corridor, with glowing blue and white lines, hexagonal patterns on the floor, and a bright, circular light source at the far end, creating a sense of depth and technological advancement.

DELPHI

Delphi Corporation

Gary Cameron

Director – Forward and Advanced Engineering

Power Electronics

October 11, 2010

Delphi Corporation

Leading Global Supplier Of Mobile Electronics And Transportation Systems

- ◆ Over 100,000 Employees in 30 Countries
- ◆ 14 Technical Centers
- ◆ More than 16,000 Engineers and Scientists
- ◆ More than 12,400 Customers (including Aftermarket and Service)



Committed to Innovation Keeping Our Planet Green, Its Occupants Safer and More Connected

MEGATRENDS

◆ People Megatrends

- Natural Growth
- People Live Longer
- Generations X & Y
- Increased Concern about Safety, Security and Privacy
- Health Care
- 8/5 > 12/6 > 24/7

◆ World Megatrends

- World Turmoil
- Globalization
- Higher Cost of Natural Resources
- Increasing Environmental Awareness/Regulations

◆ Technological Megatrends

- Information Explosion
- Wireless World

MEGATRENDS

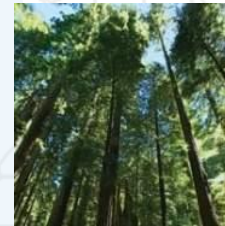
◆ Safe

- Traffic congestion in major metro areas around the world becomes worse; more accidents; longer commute; higher stress level



◆ Green

- Fast growing economies: more fuel for mobile platforms
- Demand for electrical energy and related conventional resources far exceeds current capabilities



◆ Connected

- Global demand for broadband access will continue to grow



Delphi's Market-Driven Product Lines, Segmented into Five Divisions



Electrical/Electronic Architecture

- Electrical/Electronic Distribution Systems
- Connection Systems



Electronics & Safety

- Electronic Controls
- Infotainment & Driver Interface



Powertrain Systems

- Gasoline Engine Management Systems
- Diesel Engine Management Systems



Thermal Systems

- Thermal Automotive
- Thermal Residential and Commercial Heat Exchangers



Product & Service Solutions

- Diesel
- Independent Aftermarket
- Original Equipment Service



Electronics and Safety
World Headquarters
Kokomo, Indiana. USA

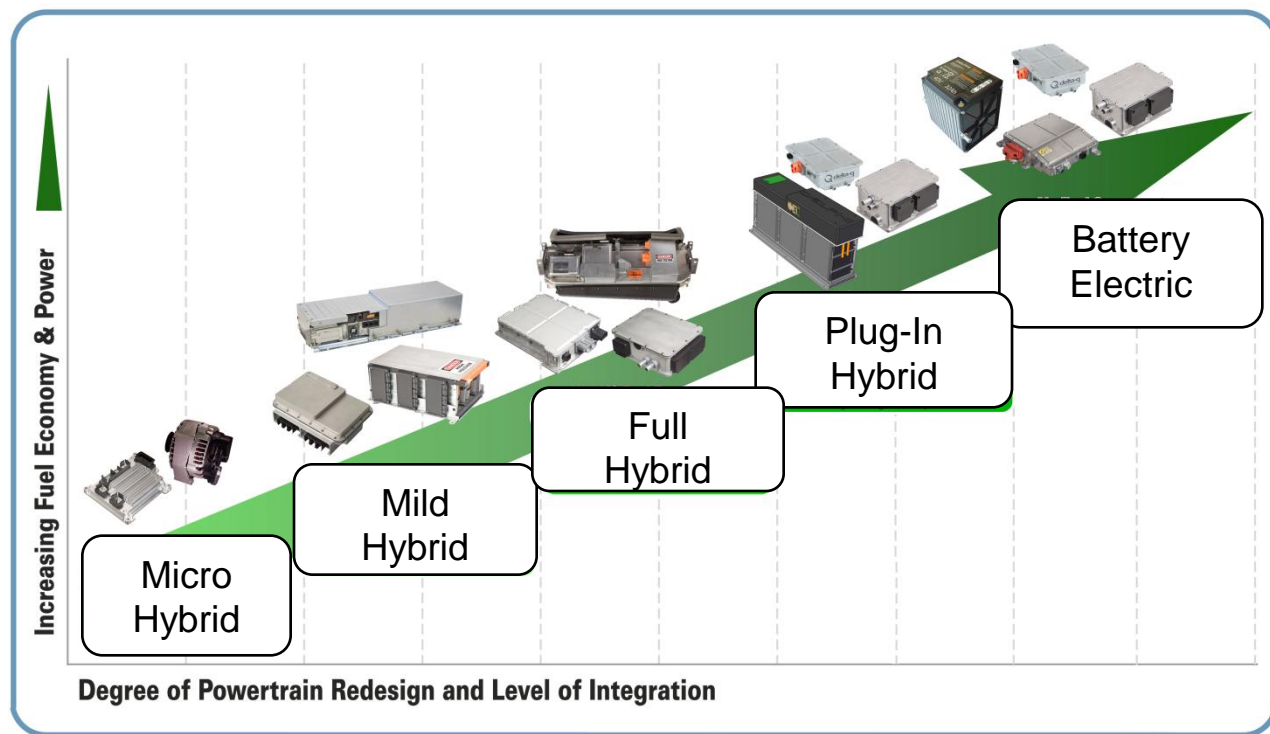
Delphi Powertrain Technology

***Balancing technological innovation and cost effectiveness
without compromising environmental considerations***

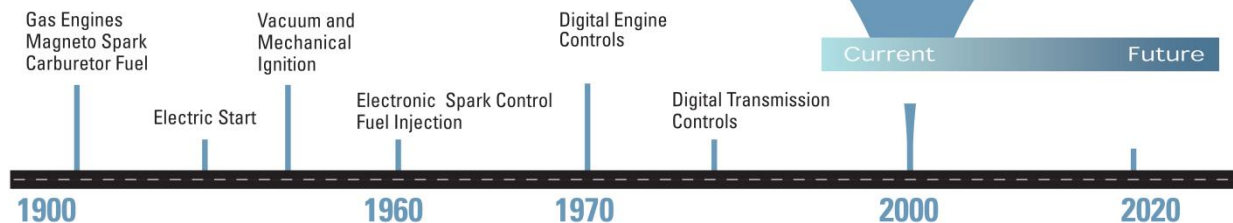


- ◆ A global leader in diesel and gasoline engine management systems
- ◆ Full line Powertrain management systems product portfolio
- ◆ Advanced technologies help manufacturers improve engine performance, enhance fuel economy and reduce emissions
- ◆ Flexible engineering approach encourages collaboration and innovation
- ◆ Systems expertise contributes to superior product design and high value

Continuing Path of Powertrain Electrification to Improve Performance, Emissions, Fuel Economy



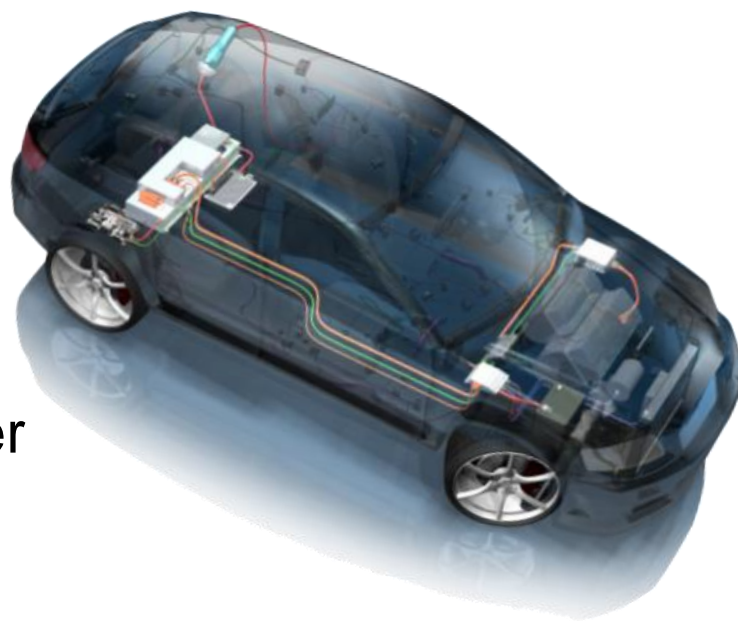
Electronics are enhancing or replacing mechanical systems to improve performance, emissions, and fuel economy.



- ◆ Delphi has a broad portfolio of electrified Powertrain products
- ◆ Electrification is a key technology to help our customers meet improved fuel economy and reduced emissions targets

Delphi Power Electronics with more than 20 years of HEV/EV Experience

- ◆ Delphi has already established itself as the largest North American supplier of power electronics and battery packs
- ◆ \$89M U.S. Dept. of Energy recipient
- ◆ Strategic partnerships and supply agreements in place
 - Chargers
 - Lithium Batteries
 - Power Silicon
 - National Labs & Universities
- ◆ Light Duty and Heavy Duty customer base with Global contracts
- ◆ We Are Expanding Worldwide

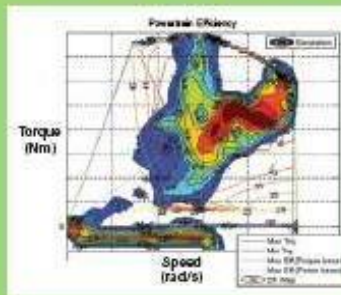


Delphi Brings Electrified Powertrain Systems to Silicon Approach and Capabilities

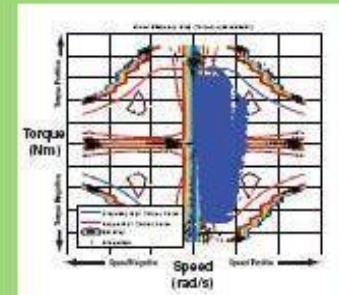
Sensitivity Studies Conducted to Determine Machine Torque and Power for Optimized Operation



Vehicle Architecture and Drive Cycle Selected



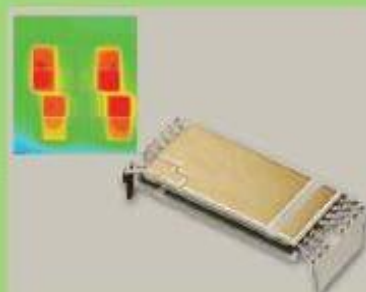
Powertrain Controls Optimization for Highest System Efficiency



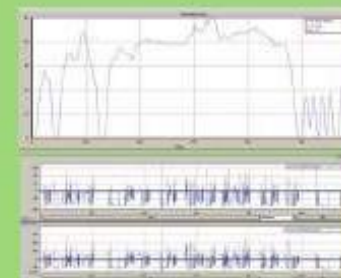
Simulation Data Provides Machine Torque vs Speed Profile



Optimized Power Stage



Analysis and Thermal System Technology Selection



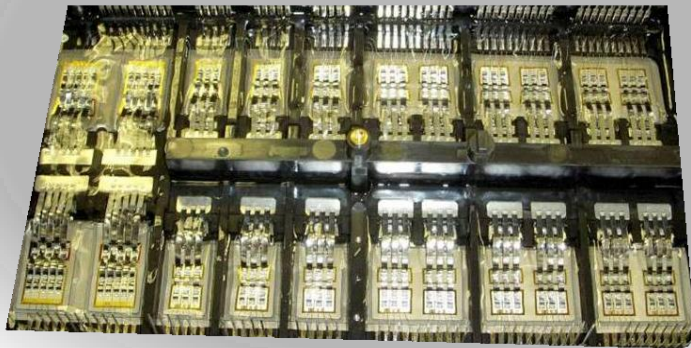
Post Processing and Optimization Motor and Battery Pack Output

Delphi Has Revolutionary Inverter Technology

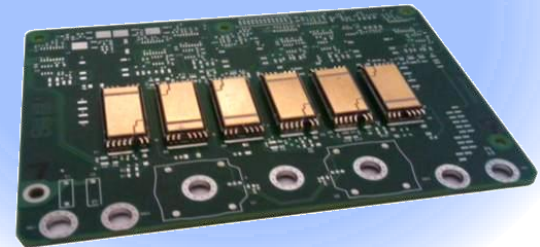
- ◆ Delphi patented power semi-conductor power switch packaging.
- ◆ More than twice the power and current density for a lower cost, lighter, and smaller Inverter through superior heat transfer
- ◆ Increased Reliability by elimination of wire bonds



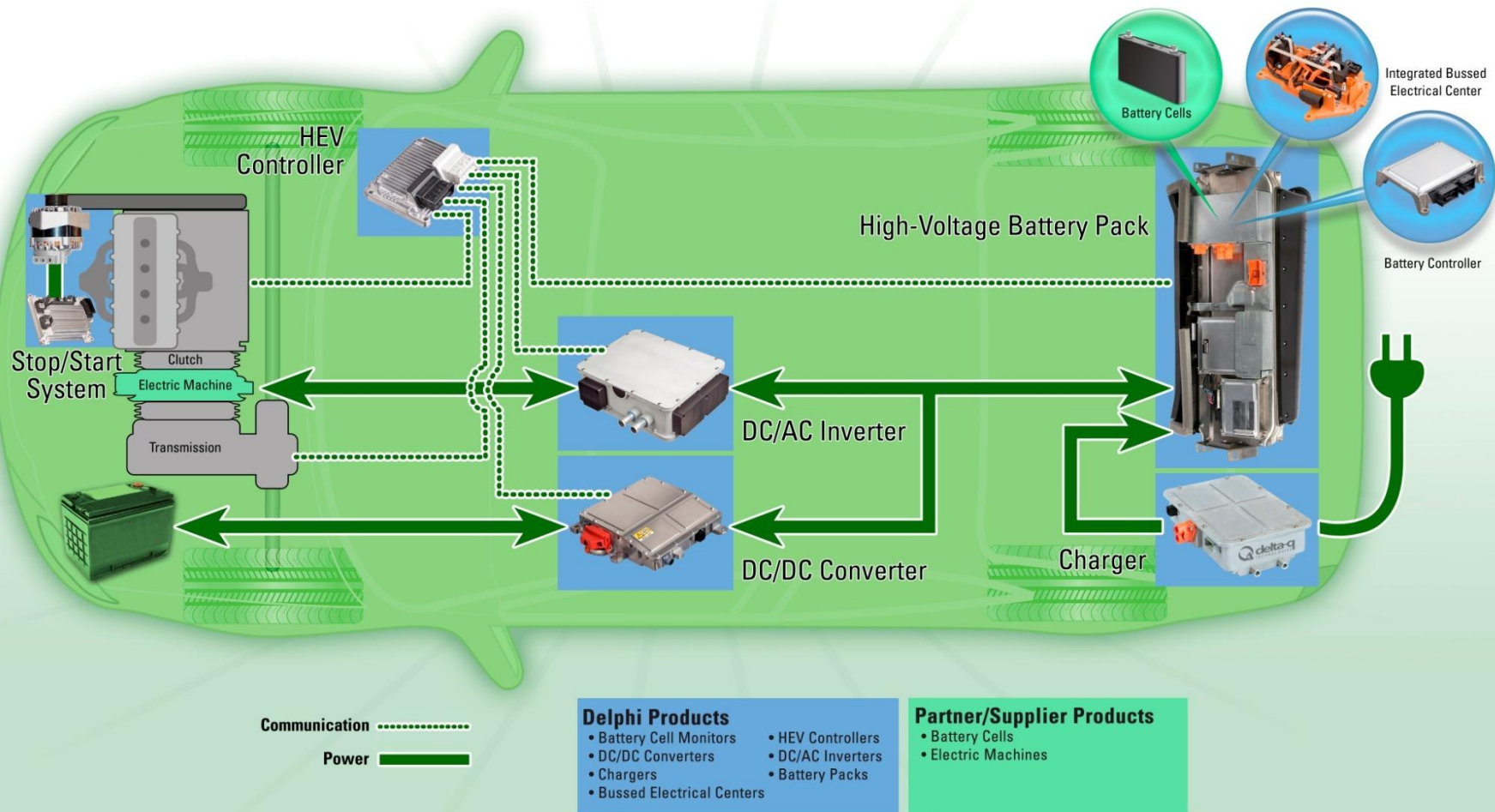
2010 Prius Inverter Power Switches



**Delphi Power Board with
Patented Power Devices**



Delphi Systems Solutions with Partnerships and Critical Component Suppliers



Market Drivers: Performance - Emissions - Fuel Economy

Delphi HEV/EV Product Portfolio

Delphi HEV/EV Products

Controllers & Algorithm

HCU



Battery Controllers



Motor Controllers



Power Electronics

Battery Charger



DC/AC Inverter



DC/DC Converter



Energy Storage

NiMH Battery Pack



Lithium Battery Pack



System Solutions

14V BAS Micro Hybrid



PowerBox Mild Hybrid



Delphi's Continued Commitment to Innovation

Unleashing the power of innovative solutions in advanced automotive electronics systems to enhance customer competitiveness



◆ Customer focus

- Lean, flexible manufacturing with outstanding quality
- High-value tech centers and manufacturing sites around the world
- Market-driven design and cost
- Flawless execution

◆ Culture of innovation

- Leader in vehicle systems development and integration
- Advanced expertise in silicon, software and systems
- Significant and protected intellectual property
- Extensive collaboration with industry, government and education

◆ Meeting our customers' technology needs

– **Safe**

- » Promoting occupant safety through systems development and design

– **Green**

- » Providing the latest electrified vehicle technology

– **Connected**

- » Offering products that provide information, convenience and protection



DELPHI

Innovation for the Real World